

## EXHIBIT 11

<b>Deposition</b>	<b>Plaintiffs' Designation</b>	<b>Defendants' Corresponding Counter Designation</b>	<b>Reason that Defendants' Counter Designation Must be Considered According to Fed.R.Civ.P 32(a)(4)</b>
Warren Nord, June 7, 2005	94:9-95:5, 129:21-130:20	45:22-46:9	Defendants' designation provides a clear statement that intelligent design is science, which relates to Plaintiffs' designations regarding how there is no Darwinian explanation for getting from non-living matter to living matter, and what the scientific establishment says about theories
	94:9-95:5, 97:4-17	64:4-68:3	Defendants' designation provides a full and uninterrupted explanation of Nord's position on the sections designated by Plaintiffs regarding an explanation for the origin of life in terms of intelligent design, Darwinian theory and gaps in evolutionary theory
	97:4-17	76:18-77:15	Defendants' designation addresses the topic of how intelligent design draws on what Plaintiffs term "accepted science," and provides part of Nord's view on those topics, and relates to the subject matter of Plaintiffs' designation regarding gaps in evolutionary theory and specifically Behe's cellular level research, which is noted in both Plaintiffs' and Defendants' designations
	94:9-95:5, 97:4-17	82:8-83:13	Defendants' designation addresses whether intelligent design is good science and why students should learn about it, and is related to Plaintiffs' designations about how there is no Darwinian explanation for certain origin of life issues
	94:9-95:5, 97:4-17	86:5-15	Defendants' designation explains a large gap in Darwin's theory, and appears shortly before two of Plaintiffs' designations also dealing with gaps in Darwinian theory

	97:4-17	97:24-100:18	Plaintiffs' have designated part of Nord's answer to a question and object to Defendants' designation, which is a continuation of the same unbroken answer regarding intelligent design theory
	129:17- 129:19, 129:21- 130:20	130:21-144:1	Defendants' designation immediately follows Plaintiffs' and is the continuation of a line of questioning about Nord's expert report and confirmation of scientific theories

SHEET 1

IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA  
CIVIL ACTION NO. 4:04-CV-2688

TAMMY J. KITZMILLER;	)	
BRYAN REHM, CHRISTY REHM;	)	
DEBORAH F. FENIMORE;	)	
JOEL A. LIEB; STEVEN STOUGH;	)	
BETH A EVELAND; CYNTHIA	)	
SNEATH; JULIE SMITH;	)	
ARALENE D. CALLAHAN	)	D E P O S I T I O N
("BARRIE"); FREDERICK B.	)	
CALLAHAN,	)	O F
	)	
	)	W A R R E N
Plaintiffs,	)	
	)	A.
vs.	)	
	)	N O R D,
DOVER AREA SCHOOL DISTRICT;	)	
DOVER AREA SCHOOL DISTRICT	)	PH.D.
BOARD OF DIRECTORS,	)	
	)	
	)	
Defendants.	)	

A P P E A R A N C E S

For the Plaintiffs: Mr. Alfred H. Wilcox  
PEPPER HAMILTON, L.L.P.  
3000 Two Logan Square  
Eighteenth and Arch Streets  
Philadelphia, PA 19103-2799

For the Defendants: Mr. Patrick Gillen  
THOMAS MORE LAW CENTER  
P. O. Box 393  
Ann Arbor, MI 48106

In Chapel Hill, N.C. Reported by:  
June 7, 2005 Rebecca R. LeClair, CVR

PACE REPORTING SERVICE  
P.O. Box 252 Cary, NC 27512  
919-859-0000

SHEET 12

Warren A. Nord, Ph.D. Direct -42-

1 A Okay.

2 Q So the philosophical naturalists would say, "There

3 is no divine purpose in life"--

4 A Uh-huh (yes).

5 Q --"and, indeed, there is no divinity."

6 A Uh-huh (yes).

7 Q The philosophical naturalist would say, "There are

8 no absolute moral values; there are socially

9 useful"--

10 A Okay.

11 Q --"values." So the philosophical naturalists would

12 take a religious approach--

13 MR. GILLEN: Objection. I'm sorry.

14 Q --in term--religion in the sense of providing

15 ultimate meaning--and say that there is no ultimate

16 meaning.

17 MR. GILLEN: Objection--

18 Q Fair enough?

19 MR. GILLEN: Objection to the form. Go

20 ahead. Answer.

21 Q And that was so clumsy, I'll come back and do it

22 again.

23 MR. GILLEN: No. You know what, Chub,

24 you and I both know it's a complicated subject

Warren A. Nord, Ph.D. Direct -43-

1 matter.

2 A Okay. If--given the religious answer, if--if

3 "religion" means answering a question that has

4 religious implications--like "Is there meaning?"--

5 and if you say no, because you've given an answer

6 to a religious kind of question, then philosophical

7 naturalism, I suppose, could be called a kind of

8 religion.

9 I myself don't like to use "religion"

10 in--in that way. For--for me, a religious view is

11 a view that holds that there is some kind of

12 purpose or meaning to existence beyond naturalism,

13 so that naturalism simply--it--it doesn't make much

14 sense to call that a religious view. But that--

15 that's a view about--that's my effort to try and

16 avoid using the word "religion" in an unduly

17 controversial or complicated way.

18 Q And forgive me, because my notes got in the way of

19 my understanding. You said a religious view as you

20 would view it requires that there is a meaning or

21 purpose to life, did you say?

22 A To reality.

23 Q To reality?

24 A To reality. That's right. There is a dimension to

Warren A. Nord, Ph.D. Direct -44-

1 reality or an aspect of reality that--that

2 transcends what we can know naturalistically. And

3 the different great world religions have defined

4 that in very different senses. And in some

5 religious traditions, you--you have God, and in

6 others, you have nirvana, or Brahman, or the Tao,

7 and something that doesn't look all that familiar

8 to our idea of God within the Western tradition,

9 but it's still an understanding of reality that

10 transcends in some--in important ways what--what a

11 naturalistic scientific worldview allows us to--to

12 say about reality.

13 And that's crucial to religion, to my way

14 of thinking, so that naturalism doesn't become

15 religious just because it gives negative answers to

16 religious questions.

17 Q Okay.

18 A I'm--I'm not sure that much hangs on that, in the--

19 in the end, even constitutionally, but--but I think

20 that's the clearest use of--of the term "religion."

21 Q And to wrap up this segment--

22 A Okay.

23 Q --is it your view that that religious--strike that.

24 Is it your view that that appreciation

Warren A. Nord, Ph.D. Direct -45-

1 for the reality of a transcendent purpose to

2 reality needs to be brought into both science and

3 science education in public schools?

4 MR. GILLEN: Object to the form.

5 A Let me give you a qualified yes, because a

6 straightforward yes would invariably be

7 misunderstood. So--and again, my understanding--

8 the--the conception of science education that I

9 argue for is locating science, in part,

10 historically and philosophically in relationship to

11 other subjects, other areas of our cultural life.

12 So that a good science education should help

13 students understand the relationship of science to

14 moral issues, political issues, religious concerns.

15 That doesn't mean that religious views

16 should be understood to be--should be understood to

17 provide some kind of legitimate alternatives to

18 science, that they can become--that--that they--for

19 example, that--that Genesis should be taught in a

20 science class--class as a contender with

21 establishment science, no.

22 Science classes should teach science. I

23 think they should include some discussion of IDT

24 because IDT should be considered science. At the--

PACE REPORTING SERVICE

P.O. Box 252 Cary, NC 27512

919-859-0000

SHEET 13

Warren A. Nord, Ph.D. Direct -46-

1 at--at the least, students should be made aware of  
2 the controversy over whether IDT is science. But  
3 any science class should also locate students  
4 within the larger cultural conversation we're  
5 having about important things.  
6 So, to that extent, religious, moral, and  
7 political views that science impinges on, has  
8 implications for, need to be part of the framework  
9 for locating students.  
10 MR. WILCOX: Okay. Why don't we take a  
11 little break.  
12 MR. GILLEN: Sure.  
13 MR. WILCOX: We've been going for an  
14 hour.  
15 MR. GILLEN: Certainly.  
16 -----  
17 (ELEVEN-MINUTE RECESS)  
18 -----  
19 Q (By Mr. Wilcox) If you will turn to the second  
20 page of your opinion--  
21 A (Examines paperwritings.) Uh-huh (yes).  
22 Q --there's a paragraph under the heading "Critical  
23 Thinking."  
24 A Yes.

Warren A. Nord, Ph.D. Direct -47-

1 Q And it's the next-to-the-last paragraph. And you  
2 say, quote, "We disagree deeply in our culture  
3 about how to make sense of nature," and then the  
4 sentence continues.  
5 A (Examines paperwritings.) Uh-huh (yes).  
6 Q And I want to go into each of the parts of it.  
7 A Okay.  
8 Q In talking about this disagreement in our culture  
9 about how to make sense of nature, are you talking  
10 about this question whether there is or is not a  
11 transcendent purpose in reality?  
12 MR. GILLEN: Objection to the form.  
13 A Yes. But again, the--the controversy occurs on, I  
14 think, two different levels. One is the level of  
15 our culture wars, where the--the issue is  
16 oftentimes framed in terms of creationism versus  
17 evolution. And--and as I said, I--I think we need  
18 to recognize that there are alternative positions  
19 there, that the usual culture-wars rhetoric doesn't  
20 work very well.  
21 And then there's also disagreement  
22 among--more narrowly among scholars--and, in fact,  
23 I think, among scientists--about how to make sense  
24 of nature, so--where IDT is--is one of the major

Warren A. Nord, Ph.D. Direct -48-

1 issues.  
2 But that--it's not--that's not the only  
3 source of that kind of conflict. It comes up with  
4 regard to fine-tuning in cosmological evolution.  
5 It comes up with regard to the origins of life. It  
6 comes up with the nature of mind and morality.  
7 There are--there are conflicts there among  
8 scholars, among philosophers and scientists and  
9 sometimes theologians, that the public is simply  
10 unaware of. So--so, you know, we've got to do a  
11 kind of two-layer analysis, I think.  
12 Q Okay. You continue in the sentence, "we disagree  
13 about evolution."  
14 A Uh-huh (yes).  
15 Q Is this the disagreement as to whether evolution  
16 has purpose or not, or is this the disagreement as  
17 to whether evolution explains the origin of species  
18 or not?  
19 MR. GILLEN: Object to the form.  
20 A Well, again, there are several different  
21 disagreements. As I said, there's--there's the  
22 culture-wars disagreement, where it's evolution  
23 versus creationism oftentimes. There's a more  
24 sophisticated analysis which--which says it's not

Warren A. Nord, Ph.D. Direct -49-

1 evolution versus creationism, but it's different  
2 understandings of evolution: Is there a design, is  
3 there a purpose to evolution? And then there's--  
4 there's the--the conflict within and on the borders  
5 of science about whether or not there should be  
6 design explanations allowed into science. So--so  
7 it's a multilayered disagreement, I think.  
8 Q And--and the third sentence--the third statement in  
9 this sentence is, quote, "we disagree about the  
10 relationship of science and religion."  
11 A (Examines paperwritings.) Yeah.  
12 Q And this is something that I don't think we've  
13 talked about yet this morning. What is the  
14 disagreement about the relationship of science and  
15 religion that you refer to?  
16 A Well, one of the questions is, of course, whether  
17 design explanations should be allowed into science  
18 or whether they're inherently religious. And my  
19 view, as I say later in the paper, is that they  
20 should be allowed into science, that they aren't,  
21 by their nature, religious.  
22 But there's--you know, there's a huge  
23 literature now on the relationship of religion and  
24 science. Ian Barbour, in the kind of work that's



SHEET 17

<p>Warren A. Nord, Ph.D. Direct -62-</p> <p>1 Q Can--I want to focus on high school here.</p> <p>2 A Yeah. Four years of--of high--</p> <p>3 Q Okay.</p> <p>4 A --high-school science, and four years of science</p> <p>5 shaped by methodological naturalism. And it--it</p> <p>6 conveys to them, unless a good deal of time and</p> <p>7 effort is spent, the idea that science can actually</p> <p>8 tell us everything that's to be said about nature.</p> <p>9 And--and that's controversial. And that</p> <p>10 inevitably--naturally, at least--slides over into a</p> <p>11 kind of philosophical naturalism. The only way to</p> <p>12 avoid that is to give them some kind of substantive</p> <p>13 examples of--and which a liberal education</p> <p>14 requires--of how science might have limitations</p> <p>15 and--and how design might figure into our</p> <p>16 understanding of nature, or even how nature, as</p> <p>17 understood by modern science, might relate to God.</p> <p>18 MR. WILCOX: May I have that repeated,</p> <p>19 just the last twenty words?</p> <p>20 (Whereupon, the sentence at Lines 11 through 17</p> <p>21 on this page was read back.)</p> <p>22 Q (By Mr. Wilcox) I did not understand your</p> <p>23 reference to design--</p> <p>24 A Uh-huh (yes).</p>	<p>Warren A. Nord, Ph.D. Direct -64-</p> <p>1 god.</p> <p>2 MR. GILLEN: Object to form.</p> <p>3 Q Is that consistent with your understanding?</p> <p>4 A So, there are three possibilities here. One is the</p> <p>5 narrowest sense that--where a scientist might</p> <p>6 suggest a design explanation with regard to some</p> <p>7 fairly discrete phenomenon--how cells work, for</p> <p>8 example.</p> <p>9 And then secondly, there's a larger</p> <p>10 question about whether that provides some kind of</p> <p>11 evidence for claims that there is a purpose in</p> <p>12 nature that--that--or a design in nature.</p> <p>13 And then there's a third level, which is,</p> <p>14 how do we explain that design in nature? Do we</p> <p>15 appeal to a supernatural god--to a god or a</p> <p>16 supernatural being who causes it?</p> <p>17 My argu--my position is that--of course,</p> <p>18 that you can make design explanations, and you can</p> <p>19 hold the position that there's design in nature</p> <p>20 apart from any commitment, theological commitment,</p> <p>21 to a god or to a supernatural being, that those are</p> <p>22 distinguishable--conceptually distinguishable kinds</p> <p>23 of--of questions. All the time, in--in our</p> <p>24 ordinary everyday relationships, and indeed in the</p>
<p>Warren A. Nord, Ph.D. Direct -63-</p> <p>1 Q --in that last answer to necessarily be a reference</p> <p>2 to what we've been talking about as intelligent-</p> <p>3 design theory.</p> <p>4 A Uh-huh (yes).</p> <p>5 Q Did you understand it to refer to intelligent-</p> <p>6 design theory, or, more broadly, to the question of</p> <p>7 a transcendent god providing a purpose in life--</p> <p>8 MR. GILLEN: Objection to form.</p> <p>9 Q --or--or in reality?</p> <p>10 A I'm not sure that I understand the question.</p> <p>11 Q Okay. We've been talking design, I think, in two</p> <p>12 different senses.</p> <p>13 A Uh-huh (yes).</p> <p>14 Q One is the narrow, inferential, explanatory--</p> <p>15 A Uh-huh (yes).</p> <p>16 Q --sense of intelligent-design theory--</p> <p>17 A Right.</p> <p>18 Q --and the other is--and perhaps we haven't been</p> <p>19 talking about it; it's only me thinking fuzzily</p> <p>20 about it--design in the sense of a purpose--</p> <p>21 A Uh-huh (yes).</p> <p>22 Q --of reality--</p> <p>23 A Uh-huh (yes).</p> <p>24 Q --that purpose being informed by a transcendent</p>	<p>Warren A. Nord, Ph.D. Direct -65-</p> <p>1 practice of science, we talk about things being</p> <p>2 designed with--without presupposing that--that we</p> <p>3 have to use religious language or theological</p> <p>4 language in doing that.</p> <p>5 So, certainly, we can talk of the idea of</p> <p>6 design as conceptually independent of the--of the</p> <p>7 idea of God. But, of course, when we talk about</p> <p>8 the design inherent in cells or in fine-tuning</p> <p>9 after the Big Bang, of course, the big question is,</p> <p>10 how does that design get to be there? But it's</p> <p>11 still a conceptually discrete question. You don't</p> <p>12 have to have a religious--you--you can--you can</p> <p>13 still have evidence for and a make a good argument</p> <p>14 for design without having any kind of theological</p> <p>15 or religious commitments, it seems to me.</p> <p>16 So I--I want to be careful to distinguish</p> <p>17 design questions from religious questions. And--</p> <p>18 and that's what allows me to say that design</p> <p>19 questions should be allowed in a somewhat enlarged</p> <p>20 science. That doesn't run us the risk of making</p> <p>21 science into a quasi-religious endeavor or a</p> <p>22 theological endeavor.</p> <p>23 Q Can you identify for us one intelligent-design</p> <p>24 theorist who claims that the source of the design</p>

SHEET 18

Warren A. Nord, Ph.D. Direct

-66-

1 was some extraterrestrial alien?

2 A Now, I know that Francis Crick argued that maybe

3 life arose here as a result of intelligent beings

4 elsewhere in the universe sort of implanting it.

5 But he, of course, wasn't an intelligent-design

6 theorist.

7 I guess I just don't--I don't see the

8 point. No, I mean, intelli--but intelligent-design

9 theorists claim that in the--claim that they can

10 do--that they can make design arguments apart from

11 theological convictions or--or commitments. And

12 that makes perfectly good sense to me.

13 Undoubtedly, some, maybe many, maybe most

14 of all them, do have religious convictions. But

15 still, you can distinguish the--the design

16 argument, the evidence for the design argument,

17 from the theological position which they may or

18 they may not hold. So that intelligent design as

19 science doesn't imply or require any kind of

20 religious worldview or conviction. It--it may well

21 be that the only way--or that the best way--maybe I

22 should say "the best way." It may well be that the

23 best way of explaining the design is in terms of a

24 supernatural god.

Warren A. Nord, Ph.D. Direct

-67-

1 But there certainly are a variety of

2 philosophical positions and very liberal religious

3 positions which hold that there's design in the

4 world but that it's not there because of a

5 supernatural god, the kind of god that's part of

6 orthodox religious traditions: Aristotelian views;

7 process-theology, process-philosophy views; some

8 feminist views of nature.

9 So--so--and again, I want to draw that

10 sharp distinction between design on the one hand

11 and supernaturalistic religion on the other.

12 Design is supernaturalistic in sense "B." Design

13 isn't allowed, given the constraints of

14 methodological or philosophical naturalism, but you

15 can still have design without committing yourself

16 to supernaturalism "A," which is a designer--an

17 independent supernatural god. Next question.

18 Q Do you know of any intelligent-design theorists who

19 are not also practicing Christians?

20 A I don't know the religious backgrounds of many of

21 them. I know Behe's a Catholic. I don't know if

22 he's a good Catholic or a bad Catholic. That's his

23 tradition. And I know that Phillip Johnson has

24 made various kinds of remarks that suggest he's

Warren A. Nord, Ph.D. Direct

-68-

1 religious in some deep sense. But, I mean, that's

2 all--about all I know about their private religious

3 views.

4 Q You pose the question, in your report, at the top

5 of Page 5, "Is IDT science?"

6 A Uh-huh (yes).

7 Q And you suggest, quote, "Arguably, what should be

8 taken seriously as science is in part, at least, a

9 matter of what good scientists take seriously."

10 That strikes me as fairly circular. How do you

11 identify what is a good scientist if you don't have

12 a notion of what science is?

13 A Well, it--it moves the focus from science in the

14 abstract to what particular individuals do. So,

15 first of all, it's important to point out the "is

16 in part," because it's in part a matter of

17 something else, which is philosophical

18 considerations.

19 But one way of--of deciding what good

20 science is is to look at what scientists do, and

21 that shifts the focus: Okay, then, what makes for

22 a good scientist? And--and the answer there is,

23 given our ordinary understanding of science, it's

24 somebody who's gotten a Ph.D. from a research

Warren A. Nord, Ph.D. Direct

-69-

1 university, who perhaps teaches in research

2 universities, who publishes in journals, and who

3 has certain kind of credentials. And then what

4 those folks do is--is define good science for us.

5 Some of the folks with those kinds of

6 credentials--not many, but a significant number--

7 the leading intelligent-design theorists have

8 Ph.D.s from good, reputable research universities

9 and teach in research universities, have published

10 some in--in the peer-reviewed journals, and--and

11 yet, they--and they--they know establishment

12 science inside and out, and yet they have come to

13 believe that methodological naturalism is too

14 restrictive, that it's a--a kind of--well, it's in

15 effect a kind of scientific fundamentalism that

16 doesn't allow design explanations to be taken

17 seriously.

18 And--and so one of the ways of defining

19 what good science is is to see what scientists with

20 the appropriate kind of credentials end up doing.

21 And so it's important, I think, that these aren't

22 people who went to Bible colleges or that rely for

23 their understanding of nature on--on Genesis, but

24 that they are thoroughly and totally at home in

PACE REPORTING SERVICE

P.O. Box 252 Cary, NC 27512

919-859-0000



Deposition of: Warren A. Nord, Ph.D.

SHEET 20					
Warren A. Nord, Ph.D. Direct -74-			Warren A. Nord, Ph.D. Direct -76-		
1		establishment science?"	1		just that they think the design has to enter into
2	A	Yeah.	2		the question of evolution. So, in some sense, yes,
3	Q	Other than Michael Behe, can you identify for us	3		we descend from other life forms. It's just that
4		one intelligent-design theorist who has a standing	4		you can't explain that evolutionary process in
5		within establishment science? I'm not talking	5		neo-Darwinian terms--or you can't explain it fully
6		about mathematics; I'm talking science.	6		in neo-Darwinian terms.
7	A	I--I guess, if the question is "Are there people	7	Q	Do IDT theorists tend to believe that the great
8		who established a relationship and published in	8		majority of species were--suddenly appeared--
9		science before they became intelligent-design	9		MR. GILLEN: Objection to form. Spec--
10		theorists?" I--I don't know. You know, about the	10		sorry.
11		best that I can do in response to that question is	11	Q	--with no record in the fossil record?
12		to say I'm not a scientist, and I do observe this	12	A	I--
13		debate more through the kind of general literature	13		MR. GILLEN: Objection to form.
14		than through my reading of scientific journals or	14		Speculation.
15		the science--the science itself.	15	A	I--I don't know.
16	Q	You continue: "What kinds of research have they	16	Q	Do you remember reading that in Pandas and People?
17		done?" I--I assume here you're talking about IDT	17	A	No.
18		scientists and what kinds of IDT research have they	18	Q	You pose the question "To what extent does the
19		done?"	19		theory draw on accepted science?" "Draw on" is a
20	A	No, not necessarily. Have they done--but here,	20		little vague. Is it your view that intelligent
21		it's important--again, I mean, anybody who gets a	21		design draws on methodological naturalism?
22		Ph.D. from a research university is going to	22	A	It certainly draws on--I mean, it certainly draws
23		have--have done research in establishment science,	23		on--on other aspects of science. And insofar as--
24		and so that's crucial.	24		as pretty much all science is defined by
Warren A. Nord, Ph.D. Direct -75-			Warren A. Nord, Ph.D. Direct -77-		
1		How familiar are they with establishment	1		methodological naturalism, it certainly draws on
2		science? What kinds of credentials do they have	2		the conclusions of that science to--as--as part of
3		because of their--their educations and things that	3		its case.
4		they might have published apart from--from IDT?	4		I mean, again, to think of Behe, he
5		And it's a more-or-less kind of question. That's	5		doesn't--you know, this doesn't come all out of the
6		relevant to--to judging--and--and again, how much	6		blue, his theory. He's--he locates his design
7		of establishment science do they have to reject?	7		arguments in the context of very deeply textured
8		If you're a creation--an old-fashioned	8		understandings of the cell, which is drawn from--
9		creation scientist and have to give up carbon-14	9		from establishment science. So it's--it's not,
10		dating, and the age of the earth, and dinosaurs,	10		again, like the old-fashioned creation scientists,
11		and all kinds of other things like that, you know,	11		who dismiss so much of establishment science and--
12		that's an argument for saying that just can't be	12		and make arguments that are unrelated to
13		considered science. But I take it that most of the	13		traditional or--or modern establishment science.
14		IDT people don't do that, that they accept an awful	14		It--again, it just seems to me to be quite a
15		lot of science.	15		different kind of--of thing.
16	Q	Do they accept that man evolved from lower life	16	Q	Let's try to get at this another way, perhaps. Do
17		forms?	17		you understand intelligent-design theory to be a
18		MR. GILLEN: Object to the form.	18		testable and tested hypothesis?
19	A	I don't know. I suppose I have to say I don't know	19	A	Yes, although the tests certainly would be somewhat
20		the answer to that. I know in--in at least a few	20		different from those employed in methodolo--within
21		cases--I mean, Behe, I know, accepts evolution;	21		a methodological naturalism. They may be
22		he's an evolutionist. And as a matter of fact, he	22		statistical tests, like Dembski--Dembski offers,
23		said--in a New York Times piece this spring, he	23		or, you know, the notion of irreducible complexity
24		says most IDT theorists are evolutionists; it's	24		that Behe uses. I mean, that's certainly--that's--

PACE REPORTING SERVICE

P.O. Box 252 Cary, NC 27512

919-859-0000

Deposition of: Warren A. Nord, Ph.D.

SHEET 22

Warren A. Nord, Ph.D.	Direct	-82-	Warren A. Nord, Ph.D.	Direct	-84-
1	maybe most of them, also come to their convictions		1	analogy, yes.	
2	out of an independent assessment of the evidence.		2 Q	Which connotes that man is created in the image of	
3	Maybe they're open to design explanations because		3	God, does it not?	
4	of religious convictions that they have, but--but		4 A	Well--	
5	that's a different question from whether those		5	MR. GILLEN: Object to form.	
6	religious convictions actually drive or shape their		6 A	--no, because, again, I want to distinguish between	
7	conclusions as scientists.		7	supernaturalism "A" and supernaturalism "B" simply	
8 Q	Okay. You continue that "whether or not IDT is		8	because there are some folks in the history of	
9	good science is in part, at least, a philosophical		9	thought who are supernaturalists "A," and there are	
10	question."		10	some folks who are supernaturalists "B," and--and	
11 A	Yeah.		11	intelligent design is compatible with either.	
12 Q	And you then state, "Modern science has prided		12	It doesn't require God understood in	
13	itself on its openness to new evidence and to the		13	traditional terms of Judaism, Christianity, and	
14	potential falsification of its theories." Would		14	Islam. It could be simply the presence of design	
15	you agree that modern science, however, is not open		15	in the universe in ways in which other philosophers	
16	to different methodologies; it insists on--		16	have understood as--as a possibility but that	
17 A	Yes.		17	doesn't rely on--on the idea of God. So--and	
18 Q	--methodological naturalism?		18	that's a crucial distinction. I--I don't want to	
19 A	Yes. And that then becomes the kind of		19	lang--we don't--we don't necessarily have to have	
20	philosophical question that it's important for		20	God just because we have design.	
21	science--scientists themselves and students who		21 Q	I'd like to switch gears and talk about the	
22	study science to be educated about: Is		22	educational value--	
23	methodological naturalism--should methodological		23 A	I'm happy to switch gears.	
24	naturalism define modern science? Because if--if		24 Q	--of the Dover Area School District--	

Warren A. Nord, Ph.D. Direct -83-

1 that question isn't opened up for discussion,

2 then--then you get what I call scientific

3 fundamentalism, whereby students are expected to

4 accept methodological naturalism more or less as a

5 matter of faith, or, that is to say, of trust in

6 the scientific establishment, rather than any kind

7 of reasoned conviction about it.

8 The only way to--to have a re--a reasoned

9 position on methodological naturalism is if you

10 understand something of the alternatives or the--

11 the debate about the adequacy of methodological

12 natural--methodological naturalism going on in our

13 larger intellectual life.

14 Q To some extent, intelligent-design theorists

15 reference things like Mount Rushmore.

16 A Yeah.

17 Q You're familiar with that--

18 A Yeah.

19 Q --sort of "I know it when I see it"?

20 A Uh-huh (yes).

21 Q That, of course, presupposes that the intelligence

22 underlying the design is an intelligence much like

23 human intelligence, doesn't it?

24 A Yeah. Well, I mean, that analogy does, yes. Or by

Warren A. Nord, Ph.D. Direct -85-

1 A Okay.

2 Q --update of the biology curriculum. The biology

3 curriculum was updated to include a preliminary

4 statement as follows, quote: "Students will be

5 made aware of gaps, slash, problems in Darwin's

6 Theory and of other theories of evolution,

7 including, but not limited to, Intelligent Design."

8 What are the--do you have any understanding as to

9 what is meant by the "gaps, slash, problems in

10 Darwin's Theory"?

11 A (Examines paperwritings.) I don't know what--since

12 I haven't read any literature or talked with any of

13 the people--what the authors of that statement

14 mean. I--I can speculate as to what it might be or

15 what I would take them to be, the--the

16 gaps/problems.

17 Q Would it, in your mind, be a reference to gaps in

18 the fossil record, for example?

19 A It could be. That's certainly one of the--the

20 kinds of gaps that oftentimes are mentioned,

21 particularly in--in intelligent-design literature.

22 Q And could it be also the difficulty that evolution

23 has in explaining the crossover from chemistry to

24 life?

PACE REPORTING SERVICE

P.O. Box 252 Cary, NC 27512

919-859-0000

SHEET 23

Warren A. Nord, Ph.D. Direct -86-

1 A That would certainly be one of the possibilities,  
 2 yes.  
 3 Q Can you think of any other gaps, slash, problems in  
 4 Darwin's theory?  
 5 A Well, I think another big one would be the  
 6 development of--of sexual reproduction. My  
 7 understanding is that--this is nothing I'm an  
 8 expert on, but my understanding is that that does  
 9 create a large problem, how you get sexual  
 10 reproduction where only the--half the genes of--of  
 11 each parent become transmitted to the offspring,  
 12 that that's not what neo-Darwinism would--would  
 13 lead one to think should happen. So how do you--  
 14 how do you get bisexual reproduction? That might  
 15 be one. I don't--I don't know.

16 I mean, certainly, there are particular  
 17 kinds of cases, the things that Behe talks about,  
 18 in--in cellular biology and biology. There's--  
 19 there's the kind of problem that Gould tried to  
 20 address with punctuated equilibria, the rapid  
 21 transitions in evolution. I suspect that's  
 22 probably one. And then the absence of--of fossil--  
 23 intermediate fossils in those kinds of cases. I  
 24 suspect those are the kinds of things, but I don't

Warren A. Nord, Ph.D. Direct -87-

1 know what in particular the authors meant.  
 2 Q Well, let me just test--see if I understand--strike  
 3 that.  
 4 I'd like to ask you if you have an  
 5 understanding as to the structure of this sentence.  
 6 One way to read it is that students will be made  
 7 aware of gaps/problems in Darwin's theory and that  
 8 they will be made aware of gaps/problems in other  
 9 theories of evolution.  
 10 A Yes.  
 11 Q Do you read it that way?  
 12 MR. GILLEN: Objection. Form.  
 13 Speculation.  
 14 A (Examines paperwritings.) I'm puzzled as to that  
 15 sentence, too. I--that seems to be--do you want to  
 16 suggest another reading to it?  
 17 Q Another reading might be "Students will be made  
 18 aware of gaps/problems in Darwin's theory, and  
 19 they"--  
 20 A And then made aware of other theories.  
 21 Q --"and then they will also be made aware of other  
 22 theories of evolution, including intelligent  
 23 design."  
 24 A Well, I suspect that's what it means because--

Warren A. Nord, Ph.D. Direct -88-

1 Q The latter?  
 2 A Right, probably, but--but I don't know.  
 3 Q Okay.  
 4 A I don't know.  
 5 Q In your view, is intelligent design another theory  
 6 of evolution?  
 7 MR. GILLEN: Objection. Form.  
 8 Speculation.  
 9 A Well, I mean, I--my impression is that at least  
 10 some, Behe says most, intelligent-design theorists  
 11 accept evolution. The question is the mechanism of  
 12 evolution. I don't know whether that's the case.  
 13 I--I just don't know whether most intelligent-  
 14 design theorists accept evolution in--in some form.  
 15 Well, I don't know.  
 16 Q Okay. So, if the school board had in mind that  
 17 intelligent design was an alternative theory of  
 18 evolution to Darwinian theory--  
 19 A Uh-huh (yes).  
 20 Q --you would say that that's not consistent with  
 21 your understanding of intelligent design?  
 22 A I'm sorry. Say that again? If--  
 23 Q If the school board--  
 24 A Uh-huh (yes).

Warren A. Nord, Ph.D. Direct -89-

1 Q --understood that intelligent design was a theory  
 2 of evolution--  
 3 A Uh-huh (yes).  
 4 Q --that stood in contrast to Darwinian--  
 5 A Uh-huh (yes).  
 6 Q --evolution, you would say that is not consistent  
 7 with your understanding of intelligent design?  
 8 A I guess what I want to say is that intelligent  
 9 design is certainly compatible with evolution, or  
 10 many--many intelligent-design theorists, my  
 11 impression is, accept evolution but reject natural  
 12 selection as the--as able to explain evolution.  
 13 But--but I just--I don't know what that sentence  
 14 means.  
 15 Q And isn't it also true that many intelligent-design  
 16 theorists don't accept that some aspects of  
 17 biological life--  
 18 A Uh-huh (yes).  
 19 Q --could not be the product of evolution?  
 20 A I mean, certainly, there are some who believe  
 21 that--  
 22 Q Behe, for example, doesn't use--  
 23 A Yeah. That's right. Not the product of  
 24 neo-Darwinian evolution.

PACE REPORTING SERVICE

P.O. Box 252 Cary, NC 27512

919-859-0000



SHEET 25

Warren A. Nord, Ph.D. Direct -94-

1 can--I could--that's not the only possibility. The  
 2 other possibility would be that--another  
 3 possibility would be that they mean "We simply  
 4 don't raise religious or philosophical questions  
 5 about where life came from. We stick to science."  
 6 I mean, it could mean that. That might be a  
 7 somewhat naive view, but it--it could mean that,  
 8 too.

9 Q Okay. The statement continues, quote, "Intelligent  
 10 Design is an explanation of the origin of life"--  
 11 Uh-huh (yes).  
 12 Q --"that differs from Darwin's view." What was  
 13 Darwin's view on the origin of life?  
 14 A I wouldn't--I wouldn't--I wouldn't write the  
 15 sentence that way, either. The point is--all  
 16 right. If--if "the origin life" does mean how do  
 17 you get from nonliving matter to--to life, then  
 18 there's no Darwinian explanation. And in fact, as  
 19 I understand it, that is a huge scientific mystery  
 20 still. We--we just don't know how--how that  
 21 happened either on grounds of methodological  
 22 naturalism or maybe any other, other than religious  
 23 or philosophical, I suppose. There are  
 24 possibilities there.

Warren A. Nord, Ph.D. Direct -95-

1 So--so, yes, if--if the reference is to  
 2 the transition from--from nonliving matter to  
 3 living matter, then there wasn't a Darwinian theory  
 4 about that. Darwinism only kicks in once you've  
 5 got reproduction.

6 Q So, if instead we read this as referring not to  
 7 "origin of life" but to "origin of species"--  
 8 A Origin of species and--and how did human beings  
 9 come to be out of prehomnids or--or whatever, then  
 10 it's true that intelligent design might well have--  
 11 or--or would have a different account of how that  
 12 story goes because of its willingness to use design  
 13 explanations.

14 Q If intelligent-design theorists are primarily  
 15 evolutionists, it's not really a different  
 16 explanation for the origin of life, is it?  
 17 MR. GILLEN: Objection to--  
 18 A Oh, sure it is. Sure it is.  
 19 Q It's only a difference from neo-Darwinism--  
 20 A Yes.  
 21 Q --not from Darwin's view, correct?  
 22 A No.  
 23 MR. GILLEN: Objection.  
 24 A It would also be from Darwin's view. And what

Warren A. Nord, Ph.D. Direct -96-

1 Darwin didn't have was modern genetics. But Darwin  
 2 still had natural selection, and that was the  
 3 mechanism that he thought worked on chance  
 4 variations. But he couldn't explain the chance  
 5 variations, and--and biologists couldn't till we  
 6 get modern genetics.

7 But, still, for Darwin--Darwin says in  
 8 his autobiography there's no more direction in  
 9 evolution than in the way the wind is blowing--how  
 10 does he put it?--there's no more design in--in  
 11 evolution than in the way the wind blows. And  
 12 Darwin was clear it was an unguided, purposeless  
 13 process.

14 So, if you--if you introduce design, if  
 15 you allow design explanations, you've at least got  
 16 the possibility for a--a quite different account of  
 17 how human beings come to be. Now, you--  
 18 Q Now, let me interrupt--  
 19 A Okay. All right.  
 20 Q --if I may, because I would ask you to point me to  
 21 the writings of any intelligent-design theorist  
 22 that claims there is a purpose in evolution and  
 23 explains what that purpose is.  
 24 MR. GILLEN: Objection to the form.

Warren A. Nord, Ph.D. Direct -97-

1 A I--I think that neo-design--pretty soon, we'll have  
 2 neo-design theory.  
 3 Q We already do.  
 4 A Intelligent-design theory is in its infancy, and--  
 5 and, you know, maybe--you know, it may be it won't  
 6 be long-lived. I--I don't know. But I don't think  
 7 there's anything like a full-fledged, at this  
 8 point, intelligent-design theory that--what, I  
 9 mean, Behe does is show that at the cellular level  
 10 there are various kinds of--of problems.

11 There are others--there are other gaps in  
 12 the evolutionary account that we talked about  
 13 earlier for which design explanations--for--for  
 14 which we might find or appeal to design  
 15 explanations, but--but I don't think there's  
 16 anything like a full-fledged intelligent-design  
 17 theory yet.

18 But still, what intelligent-design  
 19 theorists have come up with is very suggestive  
 20 and--and, I think, significant, in part because of  
 21 its implications, and particularly for its--the  
 22 questions it raises about the nature of science and  
 23 whether science needs to be defined more broadly.  
 24 Q Can we agree that, as you understand it,

PACE REPORTING SERVICE

P.O. Box 252 Cary, NC 27512

919-859-0000

SHEET 26

Warren A. Nord, Ph.D. Direct -98-

1 intelligent design is not an explanation of the  
 2 origin of life in the sense of life going from  
 3 innate chemistry to living matter?  
 4 A I don't think that there's a complete theory there.  
 5 There's--that's my impression. Again, I mean,  
 6 I'm--I'm a philosopher looking at this literature  
 7 from some distance, but my impression is that  
 8 there's not a complete theory of how design figures  
 9 in at all stages of evolution, that there are some  
 10 gaps, some problems for Darwinists, and there are  
 11 some particular places where design looks like a  
 12 pretty obvious explanation where there are no  
 13 competing Darwinian explanations. So that there's  
 14 kind of the sketch of a--of an alternative theory  
 15 that's--that's available. But--but, obviously, a  
 16 lot of work still needs to be done to fill in that  
 17 sketch.  
 18 One other thing that I'd say here, too,  
 19 that seems to me to be important, and--and that is  
 20 that, I mean, one of the reasons that I take design  
 21 theory seriously as a possible explanation,  
 22 competing explanation, is that it seems to me that  
 23 you can make a fairly strong case for design in  
 24 cosmological evolution, the kind of anthropic

Warren A. Nord, Ph.D. Direct -99-

1 fine-tuning arguments that have received a lot of  
 2 discussion among cosmologists and philosophers.  
 3 Q Just--  
 4 A At one end--  
 5 Q Just so we are--are communicating, "cosmology"  
 6 meaning how the universe got to--  
 7 A Yes.  
 8 Q --be the way it is?  
 9 A Yeah. In the--in the wake of the Big Bang, the  
 10 very extraordinary set of coincidences that  
 11 allowed--that made this universe a universe that in  
 12 the end produces life. The--the extent to which  
 13 cosmologists and defenders of the naturalistic  
 14 worldview have to go to to re--to discredit that  
 15 idea usually requires the appeal to an infinite  
 16 number of universes, which is an extraordinary move  
 17 to make.  
 18 So--so, you--you get a kind of plausible  
 19 design argument out of fine--cosmological  
 20 fine-tuning. And on this end, thirteen billion  
 21 years later, there's--there's a fair amount of--  
 22 secular philosophers oftentimes reject naturalistic  
 23 explanations of the mind. One doesn't have to be  
 24 religious, by any means, to believe that naturalism

Warren A. Nord, Ph.D. Direct -100-

1 is inadequate to explain the mind, that you need--  
 2 that--that mind is something that requires a quite  
 3 different kind of explanation than modern science  
 4 and naturalism can--can provide.  
 5 So that at both ends of our thirteen-  
 6 billion-year history, you've got design that--that  
 7 oftentimes is--is argued for on secular grounds  
 8 rather than religious grounds. So that the  
 9 intervening stages of how life came to be and--and  
 10 biological evolution--that--that there are design  
 11 explanations which are now being made available  
 12 seems to fit a larger pattern than--so, in part--  
 13 that's one of the reasons that I take it seriously,  
 14 is that it--it fits that larger pattern, and you  
 15 don't just look at the--you don't have to just look  
 16 at the kinds of arguments that Behe makes about  
 17 cells. That's an important piece of the puzzle,  
 18 but--but the puzzle's a big puzzle.  
 19 Q Spanning thirteen billion years?  
 20 A Spanning thirteen billion years, yeah, that's  
 21 right.  
 22 MR. GILLEN: Let the record reflect it is  
 23 not a young earth.  
 24 THE WITNESS: Yeah.

Warren A. Nord, Ph.D. Direct -101-

1 Q The statement goes on to say, quote, "The school  
 2 leaves the discussion of the Origins of Life to  
 3 individual students and their families." In your  
 4 view, that is not a good thing, is it?  
 5 MR. GILLEN: Objection to form.  
 6 Q Shouldn't a liberal education address discussion of  
 7 origins of life?  
 8 A Yes. But--but again, I don't know exactly what the  
 9 authors meant by--  
 10 Q Whichever they mean--  
 11 A --teaching the origins of life.  
 12 Q --whether they mean converting from innate  
 13 chemistry to living matter--  
 14 A Yeah.  
 15 Q --or whether they mean how speciation occurred--  
 16 A Yeah.  
 17 Q --whichever they meant, you would think schools--  
 18 A Well--  
 19 Q --a liberal education should address it?  
 20 A A liberal education should, and invariably does.  
 21 It's just a question of whether it's implicit or  
 22 explicit.  
 23 Q Then this--there's an explanation, which reads,  
 24 quote, "The foregoing statements were developed to



Deposition of: Warren A. Nord, Ph.D.

SHEET 33

Warren A. Nord, Ph.D.	Direct	-126-	Warren A. Nord, Ph.D.	Direct	-128-
1	about it. So a liberal education requires that--		1 Q	I had the sense of your earlier answer that perhaps	
2	that schools provide students some kind of an		2	it would be better if students were a little older	
3	understanding of these larger philosophical,		3	and more sophisticated when they were introduced to	
4	sometimes religious, questions. Otherwise, we		4	these concepts. But I heard you to be saying since	
5	leave them unable to think critically about the		5	that's where schools teach biology--	
6	conclusions that we present to them.		6 A	Yeah.	
7 Q	And I take it, in your view, the ninth grade is		7 Q	--that's where they have to address this. And that	
8	certainly none too early to start?		8	lead me--led me to my alternative suggestion:	
9 A	I--no. I--I think there's a real question about		9	Would it be better, in your view, for high schools	
10	when students became--become mature enough to deal		10	to defer teaching biology--and along with it,	
11	with controversial kinds of issues and able to		11	teaching--	
12	understand the alternatives. So that I would say		12 A	Yeah.	
13	there's a real difference between elementary and		13 Q	--additional explanations as to the significance,	
14	secondary schools in when we start introducing them		14	meaning, purpose of life--when students were a	
15	to--to deeply controversial points of view and		15	little older and better able to grasp--	
16	arguments and discussions.		16 A	Well, if students took biology when they were	
17	But ninth grade is when many students		17	seniors instead of freshman, they would probably be	
18	study biology, and it may be the only time that		18	in a better position to understand some of the	
19	many students study biology. So that it's		19	controversies. They would be more--they could be	
20	essential that they get some introduction to the		20	more intellectually sophisticated and--and make	
21	fact that there are contending ways of		21	sense of it better. That's true. But--but	
22	understanding nature at that time.		22	you're--you--you can't teach everything when	
23 Q	Would it be better, in your view, for high schools		23	students are seniors. I mean, you've got to teach	
24	to teach biology in the twelfth grade instead of		24	them some things when they're in ninth grade, some	

  

Warren A. Nord, Ph.D.	Direct	-127-	Warren A. Nord, Ph.D.	Direct	-129-
1	the ninth grade?		1	things when they're in tenth, and so on. And--and	
2	MR. GILLEN: Objection. Speculation.		2	you have--you have to balance that with arguments	
3	MR. WILCOX: As to what his own view is?		3	that science educators would make about what the	
4	MR. GILLEN: Well, yeah. What did you		4	proper sequence should be in teaching students the	
5	ask him? I'm sorry, Chub. I thought you said--		5	sciences. And ninth grade isn't too early to give	
6	should they do it?		6	them some sense of what's at issue. So, you know,	
7	THE WITNESS: I'm--I only speculate about		7	there are a lot of variables that you weigh when	
8	my own views.		8	you decide what--what to teach them when.	
9	MR. GILLEN: Okay. Good.		9	But, yes, in principle, it would be nice	
10 Q	(By Mr. Wilcox) No, I detected in your last answer		10	if students were a little older and more mature and	
11	the notion that because that's where high schools		11	better able to understand some of the issues than	
12	teach biology that's where it has to be addressed.		12	they are in--in ninth grade. But then you might	
13	But I'm saying--		13	have to teach physics in ninth grade, and then you	
14 A	It's not the only place where it has to be		14	couldn't make the--they wouldn't understand some of	
15	addressed. I mean, I think physics courses should		15	the alternatives there. So, you know, I don't know	
16	deal with the question of cosmological fine-tuning		16	how you sort that out.	
17	and--		17 Q	If you would, turn to the top of Page 8 of your	
18 Q	But I'm sticking with biology for a minute and--		18	report. The--you make some statements here that I	
19 A	Yeah.		19	just need to have your help understanding.	
20 Q	--and the meaning of life--		20 A	(Examines paperwritings.) Uh-huh (yes). Okay.	
21 A	Yeah.		21 Q	You say, quote, "Because scientific theories can be	
22 Q	--what--what--the question whether there is meaning		22	confirmed they aren't mere speculation." I'm not	
23	or purpose in biological life.		23	quite sure what you mean by that. Do you--	
24 A	Right.		24 A	Well, I think some people who talk about evolution	

SHEET 34

Warren A. Nord, Ph.D. Direct -130-

1 being--or, you know, Darwinism being a theory  
2 mean--mean to discredit it by saying it's mere  
3 speculation. So the scientific establishment has  
4 responded in turn that a theory isn't mere  
5 speculation and hypothesis, that the theories can  
6 be confirmed.

7 And I think that's a--that's a valid  
8 viewpoint. Theories can be confirmed. They can be  
9 confirmed more or less. And, so, oftentimes,  
10 neo-Darwinism--or evolution, the idea--the theory  
11 of evolution is contrasted with heliocentric theory  
12 or the theory of gravity, which have so much  
13 confirmation that--that it's wildly misleading to  
14 suggest they're mere speculation. And I--and I  
15 agree with that.

16 So the--the effort on the part of--of  
17 some opponents of evolution to say that it's a--  
18 it's a--it's a mere theory, I think, missed the  
19 legitimate scientific point that theories can be  
20 confirmed.

21 Q Okay. And then you say, "I believe it is  
22 appropriate for science texts"--and, I assume,  
23 science teachers--

24 A Uh-huh (yes).

Warren A. Nord, Ph.D. Direct -131-

1 Q --"to teach students that most scientists believe  
2 that neo-Darwinism is a confirmed theory."

3 A Yes.

4 Q And then you continue by saying, "Still"--which I  
5 interpret as kind of a "however"--"the  
6 distinction"--

7 A (Examines paperwritings.) Yes, you're right.  
8 That's a still--that's a "however" "still."

9 Q --"the distinction rightly suggests that because  
10 neo-Darwinism is a theory, its confirmation rests  
11 not simply on observation"--

12 A As do facts.

13 Q --"but on a wide range of complex considerations  
14 which are potentially open for reinterpretation."

15 A Yes.

16 Q Now, you lost me there, because I thought  
17 confirma--theories are confirmed by observation and  
18 not by a wide range of complex considerations.

19 A Oh. Facts--facts are things that we observe  
20 directly. Theories hinge on all kinds of things we  
21 can't observe directly.

22 So that--I mean, it's a fact that the cup  
23 is right here. (Indicating.) I can observe it  
24 directly. But that--the fact that the cup is made

Warren A. Nord, Ph.D. Direct -132-

1 out of electrons and protons and neutrons and  
2 photons and, you know, all of those things--that's  
3 a theory. That's--that has to do with atomic  
4 theory. And--and I can't observe any of that stuff  
5 directly. That's a--that hinges on all kinds of  
6 scientific laws and--and complicated theories,  
7 which have implications for our observations but--  
8 but go way beyond our observations.

9 So that the theor--neo--neo-Darwinism as  
10 a theory rests on a whole set of complex  
11 considerations and complex kinds of arguments and--  
12 and evidence. We can't observe evolution. And--  
13 and that's important, because factual judgments can  
14 be confirmed directly by virtue of our  
15 observations; theories can be more or less  
16 confirmed, but they go way beyond our immediate  
17 observations.

18 So, most scientists, I think, believe  
19 that neo-Darwinism is a confirmed theory. Now, I  
20 would say probably--and I perhaps should have said  
21 that--that its confirmation has a high degree of  
22 probability for most scientists. Most scientists  
23 accept it as a confirmed theory.

24 But because--but there's still a point to

Warren A. Nord, Ph.D. Direct -133-

1 the kind of objection that some people make to--to  
2 evolution, because its confirmation rests on a  
3 whole set of complicated considerations that are  
4 perhaps open to alternative interpretation, namely  
5 design interpretations.

6 Q Okay.

7 A But--but I think that students should be taught--  
8 you know, I'm not in favor of--of balanced  
9 treatment in the sense of giving equal time to  
10 alternative theories. And in my ideal biology  
11 textbook, you know, you don't give equal time to  
12 Biblical creationism, or--or just limiting us to  
13 scientific views, to design theory and to  
14 establishment science, but, of course,  
15 establishment science has got to receive most of  
16 the--the time and--and--pages in the textbook and  
17 hours in the--in the class. But you can't exclude  
18 legitimate alternatives.

19 And so design theory has to be taken at  
20 least seriously enough so students are made aware  
21 of it and given, ideally, some sense of what it is.  
22 Short of that, the kind of disclaimer that Dover  
23 wants to have seems to me to be a very, very modest  
24 step in the right direction.

SHEET 35

Warren A. Nord, Ph.D. Direct -134-

1 Q Under the heading "The Present Case"--

2 A (Examines paperwritings.) Yes.

3 Q --you say, "By making students aware of the

4 controversy surrounding Darwin's theory of

5 evolution, including IDT, the Dover School District

6 is promoting legitimate, secular, pedagogical goals

7 and enhancing their science education and student

8 learning." Given some of the ambiguities,

9 inconsistencies, problems, and gaps that we've

10 noticed in the--

11 A Yeah.

12 Q --board's statement, and the fact that it is just

13 read and then abandoned for the rest of the--

14 A Yes.

15 Q --semester, do you think this might be an

16 overstatement here?

17 A (Examines paperwritings.) It is promoting a

18 legitimate, secular, pedagogic--pedagogical goal,

19 and it is minimally enhancing their science

20 education and student learning.

21 I mean, you're right. It's--it's--you

22 know, I--I think Judge Cooper's decision was

23 ludicrous because he thought that that little

24 disclaimer that they pasted in the Georgia

Warren A. Nord, Ph.D. Direct -135-

1 textbooks somehow or another conveyed the idea that

2 the--that the school board was on the side of--or

3 was--was opposed to--to teaching--teaching

4 evolution, in spite of the fact that the school

5 board chose the textbooks, which, as he

6 acknowledged, had hundreds of pages on evolution.

7 So, I mean, it's ludicrous to attach that

8 much importance to the sticker--which also, of

9 course, means, you know, why are you-all so upset

10 about it?--because it--it doesn't have that kind of

11 cosmological import.

12 But--but it serves the--the goal in a--in

13 a kind of mini--minimal but important way of--of

14 making students aware of the fact that there are

15 alternatives. And that in itself is worthwhile

16 even if it isn't nearly as--as--have the kind of

17 substantial implications that it--that it should.

18 I mean, as I said, I would have students

19 learn something much more about the philosophical

20 and historical issues relating to design and--and

21 methodological naturalism and neo-Darwinism than

22 is--than is usually done, but at least make them

23 aware of the fact that there's a controversy.

24 Q Okay. The controversy that you're referring to in

Warren A. Nord, Ph.D. Direct -136-

1 this statement--

2 A Uh-huh (yes).

3 Q --that we just quoted is as to whether there is or

4 is not purpose underlying life?

5 A It's--it's the--it's to make them aware of the

6 controversy regarding design explanations in

7 biology, yes, that--that there is an alternative

8 theory for understanding nature that--that involves

9 design explanations, yes, and so is--you know, I

10 want it to be much more substantial than it is

11 to--to really serve the purposes of liberal

12 education. But it--but it--it serves the minimal

13 purpose of alerting them to a controversy that's--

14 that's real and that's important.

15 Q And that's the contro--the controversy is--

16 Is--is over whether design explanations have a role

17 in biology.

18 Q And by "design explanations" here--

19 A Uh-huh (yes).

20 Q --we're using it not in the sense of design of a

21 particular bacterial flagellum but rather in the

22 broader sense of "Is there purpose to life?" Is

23 that--

24 MR. GILLEN: Objection to form.

Warren A. Nord, Ph.D. Direct -137-

1 Q Isn't that what you mean?

2 A The--the two are related, but, I mean, intelligent-

3 design theory, insofar as it holds that there are

4 design explanations that are--are plausible, that

5 are reasonable explanations, is compatible with and

6 open to the possibility, then, that there is some

7 kind of larger design in nature. It's also open to

8 the possibility that there's a supernatural

9 explanation, but it doesn't require any of those

10 things.

11 But--but, yeah, I mean, I think that--

12 that the--that the controversy is over whether or

13 not--that--the--the underlying principle is that

14 when there's a controversy, students should be made

15 aware of different points of view.

16 Now, there's a controversy over

17 evolution. Some of the points of view are

18 religious. And I think they should be included

19 at--at some point in the--in the curriculum.

20 Where, is an important question, obviously.

21 But there are also--there is also a--a

22 scientific controversy, at least if we are willing

23 to have a somewhat broader definition of science

24 than establishment science holds. There's a



SHEET 36

Warren A. Nord, Ph.D. Direct -138-

1 controversy about that, what it means to be  
 2 scientific. And students should inform--be  
 3 informed about that.  
 4 And--and then the controversy is, do  
 5 design ex--are design explanations legitimate? I--  
 6 I think, since there is a respectable case that can  
 7 be made for that, that students need to be made  
 8 aware of it. "Respectable" meaning, as we talked  
 9 before, in terms of arguments and evidence cited by  
 10 people who have credentials in science and who use  
 11 other aspects of science as--as--in the process of  
 12 being scientists, who--who don't flatly reject  
 13 everything that science has to say, and that aren't  
 14 incompetent and un--uneducated in establishment  
 15 science.  
 16 Q Let me see if you can agree with this--  
 17 A Okay.  
 18 Q --statement: Throughout your opinion, you have  
 19 referred to significant disagreement and important  
 20 controversies. Isn't it true that what makes the  
 21 controversy important is the implications as to  
 22 whether there is a meaning to life--  
 23 A Uh-huh (yes).  
 24 Q --other than sheer random, unguided, purposeless

Warren A. Nord, Ph.D. Direct -139-

1 actions of atoms?  
 2 A Yeah. I mean, that's what--that's what makes the  
 3 controversy important to most people. And--and I  
 4 can't--I don't know what--I've not talked with and  
 5 I've not read what the school board said about it,  
 6 so I--you know, I can't speak to--to that.  
 7 But, for most people, undoubtedly, that's  
 8 why it's important. That's not the only reason or  
 9 maybe even--I mean, that's one--one reason why  
 10 students should be educated about the controversy.  
 11 But the other reason is because there is  
 12 a debate, a controversy, among scientists about  
 13 what counts as a good and an adequate scientific  
 14 explanation. And that controversy in and of itself  
 15 is important enough to warrant refu--reference to  
 16 intelligent design, I think, in--in the curriculum.  
 17 Now--now, many people, no doubt, would--  
 18 would say, "I could care less about this--this  
 19 debate among scientists and--and who gets to count  
 20 as scientists and who doesn't. I believe what  
 21 Genesis tells me." I--I mean, of course. And  
 22 that's why this debate is so important to many  
 23 people.  
 24 But that's not the only reason it's

Warren A. Nord, Ph.D. Direct -140-

1 important. And--and the warrant of references to  
 2 intelligent design, and ideally some discussion of  
 3 it, stem from the fact that there is--there is a  
 4 serious intellectual controversy among scholars,  
 5 credible scientists, and philosophers who--some of  
 6 whom are secular, not--not religious, about the  
 7 nature of design in--the nature of design in  
 8 nature, the--whether--whether there's design in  
 9 nature. And, as I said, not just in biology but  
 10 also in cosmology, and also in how we understand  
 11 the brain and the mind, and in other areas of  
 12 science.  
 13 So it's not just this case, even though  
 14 that's the one people pick up on 'cause that's--  
 15 that's the one that is personally--it's a part of  
 16 our culture wars.  
 17 Q Do you believe ninth-grade biology students should  
 18 be taught that man and the species as we know them  
 19 today did not gradually evolve from other life  
 20 forms but appeared suddenly in the historical  
 21 record?  
 22 A If you mean should they be taught that that is  
 23 true, the answer is no. That--that would be, in  
 24 fact, an endorsement of a religious worldview, and

Warren A. Nord, Ph.D. Direct -141-

1 it would be unconstitutional and would also be--I  
 2 mean, it's a deeply controversial position held by  
 3 a minority of scholars.  
 4 So, no, they shouldn't be taught that  
 5 that's true. But as I said earlier, it seems to me  
 6 that an introductory biology text, whether in  
 7 undergraduate school or in high school, should  
 8 locate biology within historical and philosophical  
 9 controversies, so that if students are to be  
 10 liberally educated, they appreciate the tensions,  
 11 the conflicts, the overlaps between various ways of  
 12 making sense of nature.  
 13 So, yes, I think a Biblical text--I  
 14 mean--Biblical--a biological text--which is a  
 15 Biblical text to some people--a biological text  
 16 might well say something about creationism and  
 17 Genesis--not much, but a little--talk about the  
 18 differences between that and intelligent-design  
 19 theory, talk about other ways, maybe Lamarckian  
 20 evolution--  
 21 Q Would it be okay--  
 22 A --so--  
 23 Q --for a text, and teachers teaching in accordance  
 24 with the text, to explain to students that, you

SHEET 37

Warren A. Nord, Ph.D. Direct -142-  
 1 know, for a long time, Western man thought that God  
 2 created the earth and everything in it just the way  
 3 the Bible said--  
 4 A Sure.  
 5 Q --and that notion has now been scientifically  
 6 discredited by everything we've come to understand  
 7 through study of the fossil record and the nature  
 8 of life processes?  
 9 A No. I--I think probably it would be const--legally  
 10 wise to--to qualify that last judgment and say that  
 11 most--many scientists--most scientists--  
 12 Q Ninety-nine-point-four--  
 13 A --believe something--believe something otherwise--  
 14 Q Ninety-nine and forty-four--  
 15 A --right--than simply say--  
 16 Q --one-hundredths percent?  
 17 A --than simply say the Bible is wrong.  
 18 Q But it--it would be okay, in your view, to teach  
 19 that ninety-nine and forty-four one-hundredths  
 20 percent, or whatever the number is--  
 21 A Yeah.  
 22 Q --think that that's--  
 23 A I argue, in--in that book and elsewhere, for what I  
 24 call the principle of cultural location and weight.

Warren A. Nord, Ph.D. Direct -143-  
 1 That is to say that when we locate students in  
 2 con--in--when we locate contemporary science or  
 3 contemporary economics or whatever in the larger  
 4 cultural conversation, students shouldn't just be  
 5 presented with alternatives like our cafeteria  
 6 line, again. They should be given some sense of  
 7 what the--what the majority positions are, what the  
 8 minority positions are, and for whom.  
 9 So, yes, I think sci--I think students  
 10 should be taught in biology classes that the  
 11 majority--the vast majority of scientists hold to a  
 12 neo-Darwinian view, but that not all of them do.  
 13 And I would, you know, want to convey the  
 14 idea that--that, of course, many scientists don't  
 15 deal with biology and neo-Darwinism, but of those  
 16 who do, the vast majority hold to neo-Darwinism;  
 17 but it isn't the only view, and--and there are  
 18 people who raise questions about it who have  
 19 credentials as--as scientists, and so you need to  
 20 learn something about it.  
 21 You don't give equal time to the two  
 22 points of view. Of course, the dominant  
 23 establishment view gets the most time and the most  
 24 pages in the textbook. But the other point of view

Warren A. Nord, Ph.D. Direct -144-  
 1 has to be mentioned. It has to be acknowledged.  
 2 MR. WILCOX: Thank you very much.  
 3 MR. GILLEN: Thank you, Chub. Thanks,  
 4 Warren.  
 5 (WITNESS EXCUSED)

(WHEREUPON, THE DEPOSITION WAS CONCLUDED AT 12:38 P.M.)

INSTRUCTIONS TO WITNESS:

Please read carefully the following Witness Certificates and then sign and date the appropriate certificate. Do NOT sign both of them!

IF YOU MADE CORRECTIONS, SIGN CERTIFICATE (A):

CERTIFICATE OF WITNESS (A)

I, \_\_\_\_\_, a witness  
 in the above-entitled action, do hereby certify that I have  
 reviewed the transcript of my deposition and have attached  
 corrections to the same, along with the reason for each  
 correction.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

(WARREN A. NORD, PH.D.)

IF YOU DID NOT MAKE CORRECTIONS, SIGN CERTIFICATE (B):

CERTIFICATE OF WITNESS (B)

I, \_\_\_\_\_, a witness  
 in the above-entitled action, do hereby certify that I have  
 reviewed the transcript of my deposition and have made no  
 corrections to the transcription.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

(WARREN A. NORD, PH.D.)

rr1: (6-7-2005)